

REMARKS

The Applicant thanks the Examiner for the telephone interview with Applicant's counsel on June 16, 2004. The Applicant appreciates the opportunity to explain some of the distinctions between the present application and the prior art.

The present application includes claims 1-25. Claims 1-25 were rejected by the Examiner. By this amendment, independent claims 1, 7, 13, 20, and 23 as well as dependent claims 6, 12, 14, 19, 21, 24 have been amended. All claims are now believed to be in allowable condition.

In the May 6, 2004 Official Action, Examiner cited the following rejections:

- Claims 1-4, 6-10, 12-17, 19-21, 23 & 24 were rejected under 35 U.S.C. 102(e) as being anticipated by Greenberg (US65614201).
- Claims 5, 11, 18, 22 & 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Greenberg in view of Wang et al. (US6646541).

I. THE SECTION 102 REJECTIONS

The Applicant first turns to the Examiner's rejection of claims 1-4, 6-10, 12-17, 19-21, 23 & 24 as rejected under 35 U.S.C. 102(e) as being anticipated by Greenberg. Amended independent 1, 7, 13, 20, and 23 and their respective dependent claims are believed to be distinguishable from Greenberg in present condition.

The system and method of Greenberg relates to voice enhanced diagnostic medical ultrasound imaging systems. A user can interact with an imaging system by issuing verbal commands instead of using a mouse, keyboard, or other user interface (Abstract). Specifically, a user speaks a single voice command which is then converted

into a function. (10:27-36). The function is automatically assigned to single user interface device. (10:27-36). The user interface device may then be used to perform the function. (10:27-36).

In the present invention, a user may utilize a plurality of verbal commands to control a medical device. A first verbal command may be used to select a function and a second verbal command may be used to assign the function to an input device. The input device may then be used to perform the function. For example, a user may wish to adjust the properties of an image during surgery. The user may speak a first verbal command, preferably a specific function performed by the medical imaging system such as “zoom,” for example. The user may then speak a second verbal command assigning a specific input device to control the function specified in the first verbal command. For example, a user may say “pedal one,” indicating that pedal one on a foot input console will control a zoom function to view the image. Accordingly, a user may choose which input device she would like to use to perform the function.

The system and method of Greenberg does not teach a system control and speech recognition processor for receiving a first verbal command from a microphone, selecting a function, receiving a second verbal command from the microphone, and assigning the function to an input device. These limitations are recited in independent claims 1, 7, 13, 20, and 23, as amended. Accordingly, Greenberg does not teach the limitations of independent claims 1, 7, 13, 20, or 23 or their dependent claims. Therefore, the Applicant respectfully submits that the claims of the present application should be allowable.

II. THE SECTION 103(A) REJECTIONS

Next, the applicant turns to the Examiner's rejection of Claims 5, 11, 18, 22 & 25 under 35 U.S.C. §103(a) as being unpatentable over Greenberg in view of Wang.

Amended independent claims 1, 7, 13, 20, and 23 and their respective dependent claims are believed to be distinguishable from Greenberg in view of Wang.

As mentioned above, the system and method of Greenberg relates to voice enhanced diagnostic medical ultrasound imaging systems. A user speaks a single voice command which is then converted into a function. (10:27-36). The function is automatically assigned to single user interface device. (10:27-36). The user does not have the ability to choose which input device she would like to perform the function.

Wang discusses a control system for providing a surgeon with the ability to control all of the equipment in an operating room, even the lights, from a single user interface. (4:12-15; 4:51-67; 1:14-20). As explained in Wang, instruments generally have a unique control interface for their operation. (1:29-30). As such, a surgeon must independently operate each device and independently learn each control interface. (1:14-20; 1:29-62). For example, prior to Wang, in order for a surgeon to use two devices which were voice operated, the surgeon must remove the microphone for one and replace it with the microphone of the other. (1:43-48). As another example, prior to Wang, if the doctor needed the lights dimmed, a nurse would have to physically walk and dim the lights. In the system of Wang, the doctor could control various apparatus within an operating room using a single user interface. (4:51-67). For example, if a doctor wanted to dim the lights and control a voice activated device, Wang discusses how to do so with a single microphone. Accordingly, the focus of Wang is a single user interface which controls multiple devices in an operating room. Wang has little discussion of controlling

a single device. The foot pedal, as mentioned in Wang, is merely another item which may be consolidated onto the single user interface.

The system and method of Greenberg in view of Wang does not teach or suggest a system control and speech recognition processor for receiving a first verbal command from a microphone, selecting a function, receiving a second verbal command from the microphone, and assigning the function to an input device. These elements are cited in amended independent claims 1, 7, 13, 20, and 23. Specifically, in Greenberg, a user speaks a single voice command which is then converted into a function. Moreover, the function in Greenberg is automatically assigned to a single user interface device. Wang discusses consolidating multiple user interfaces into a single user interface for controlling an entire operating room. Accordingly, Greenberg in view of Wang does not teach or suggest the limitations of independent claims 1, 7, 13, 20, or 23 or their dependent claims. Therefore, the Applicant respectfully submits that the claims of the present application should be allowable.

By this response, independent claims 1, 7, 13, 20, and 23 as well as dependent claims 6, 12, 14, 19, 21, 24 have been amended. Amended independent claims 1, 7, 13, 20, and 23 recite the additional element of a plurality of verbal commands. As discussed above, Greenberg does not teach these limitations. Moreover, Greenberg in view of Wang does not teach or suggest these limitations.

CONCLUSION

Accordingly, the application as amended is now believed to be in condition for allowance and an action to this effect is respectfully requested. If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below. The Commissioner is authorized to charge any necessary fees or credit overpayment to the Deposit Account of GTC, Account No. 070845.

Respectfully submitted,

Date: June 29, 2004



Brian C. Bianco
Registration No. 51, 471

MCANDREWS, HELD, & MALLOY, LTD.
500 West Madison Street, 34th Floor
Chicago, IL 60661
Telephone: (312) 775-8000
Facsimile: (312) 775-8100